

CLAIMS:

1. A method for profiling a target application running on an informational processor, the method comprising:

using DPCL (Dynamic Probe Class Library) instrumentation for;

5 selecting at least one function and/or CPU usage in a target application to be traced;

attaching a -p and/or -pg flag to the at least one function or CPU usage;

running at least part of the target application; and

writing one or more results of the at least one function and/or CPU usage

10 with the attached -p and/or -pg flag in a gmon.out format.

2. The method according to claim 1, wherein the step of running includes changing the selection of the at least one function and/or CPU usage placement in the target application that is already running.

3. The method according to claim 1, wherein the step of running includes stopping the target application before the completion of the target application.

4. The method according to claim 1, wherein the step of attaching a -p and/or -pg flag includes adding or deleting at least one -p and/or -pg flag while the target application is running.

5. The method according to claim 4, the method comprising; analyzing the gmon.out output file with standard characterization tools.

6. The method according to claim 1 wherein the step of attaching a -p and/or -pg flag to the target application includes attaching a -pg flag into the target application program directly and without the use of source code for the target application.

7. The method according to claim 6, wherein the step of attaching a -p and/or -pg flag to the target application includes attaching a -pg flag into the target application program directly and without the need to recompile and/or relink the target application.

- 5 8. The method according to claim 1 wherein the step of writing one or more results of the at least one function and/or CPU usage with the attached -p and/or -pg flag in a gmon.out format further comprising;

totaling the at least one function and/or CPU usage with a -p and/or -pg flag into a summary register so as to provide a running total.

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9. A computer readable medium containing programming instructions for profiling a target application running on an informational processor, the program instructions comprising instructions for:

using DPCL (Dynamic Probe Class Library) instrumentation for;

5 selecting at least one function and/or CPU usage in a target application to be traced;

attaching a -p and/or -pg flag to the at least one function or CPU usage;

running at least part of the target application; and

writing one or more results of the at least one function and/or CPU usage

10 with the attached -p and/or -pg flag in a gmon.out format.

10. The computer readable medium of claim 9, comprising the instructions for changing the selection of the at least one function and/or CPU usage placement in the target application that is already running.

11. The computer readable medium of claim 9, comprising the instructions for stopping the target application before the completion of the target application.

12. The computer readable medium of claim 9, comprising the instructions for attaching a -p and/or -pg flag includes adding or deleting at least one -p and/or -pg flag while the target application is running.

13. The computer readable medium of claim 12, comprising the instructions for: analyzing the gmon.out output file with standard characterization tools.

14. The computer readable medium of claim 9, comprising instructions for attaching a -p and/or -pg flag to the target application includes attaching a -pg flag into the target application program directly and without the use of source code for the target application

15. The computer readable medium of claim 14, comprising instructions for attaching a -p and/or -pg flag to the target application program directly and without the need to recompile and/or relink the target application.

- 5 16. The computer readable medium of claim 9, comprising instructions for writing one or more results of the at least one function and/or CPU usage with the attached -p and/or -pg flag in a gmon.out format further comprising:

totaling the at least one function and/or CPU usage with a -p and/or -pg flag into a summary register so as to provide a running total.

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17. A data processing system having at least one processing element running under an operating system comprising:

a target application program running under an operating system;

a benchmark application for profiling the target application;

5 a DPCL diagnostic instrumentation for at least one function and/or CPU usage in which a -p or -pg flag has been attached; and,

a output file in a gmon.out file format for collecting the results of the at least one function and/or CPU usage with the attached -p and/or -pg flag attached.

10 18. A data processing system according to claim 17, further comprising an input device for control of the DPCL diagnostic instrumentation.

19. A data processing system according to claim 18, further comprising a input device for changing the DPCL diagnostic instrumentation during the operation of the

15 target application.